REMARKS

Responsive to the Office Action dated 17 July 2002, claim 26 has been amended. Claims 26-46 are currently pending in the application. No new matter has been added. Reconsideration of the claims is respectfully requested.

In paragraph 1 on page 2 of the Office Action, claims 26-30 and 33-46 were rejected under 35 U.S.C. §102(e) as being anticipated by Jokiaho. According to the Office Action the Examiner asserts that, Jokiaho identically discloses all the limitations of Applicants' claimed invention.

In paragraph 2 on page 3 of the Office Action, claims 31-32 were rejected under 35 U.S.C. §103(a) as being unpatentable over Jokiaho in view of Stewart. According to the Office Action the Examiner asserts that, Jokiaho discloses all the limitations of Applicants' claimed invention except using the past behavior of the mobile to determine a location accuracy level. However, according to the Office Action, Stewart discloses the omitted limitation and that it would have been obvious to have combined the disclosures of Jokiaho and Stewart to arrive at the Applicants' claimed invention.

The Applicants respectfully traverse these rejections. The Applicants respectfully submit that the cited references do not disclose, teach or suggest the Applicants' invention as set forth in independent claims 26 and 44-46. The Applicants respectfully submit that there are patentable differences between the cited references and the Applicants' claimed invention. The Applicants' invention differs from the cited references for at least the following reasons.

The Applicants set forth in independent claim 26, a method of location management in a mobile telecommunication system. The telecommunications system

including mobile stations, at least one core network providing telecommunication services, and a radio access network providing connections between the mobile stations and the core network. Information concerning the location of the mobile station is stored in the radio access network. The method includes tracking in the radio access network of the location of the mobile station to the accuracy of a location area and determining in the core network a reporting area comprising at least one location area. The method also includes informing the radio access network by the core network of the reporting area determined and receiving at the radio access network a location update from the mobile station. The method also includes determining by the radio access network based on the location update whether or not the mobile station has moved out of the reporting area and sending by the radio access network to the core network a report if the mobile station has moved out of the reporting area.

At least the following significant advantages are obtained via application of Applicants' claimed invention. The core network can specify the accuracy of location information about a mobile station by defining reporting areas. Subscribers may have different levels of service and rights to use different services at different reporting areas. Receipt of a location information report enables the core network to check these issues. By allowing the core network to specify the reporting areas, unnecessary signaling between the core network and radio access network relating to informing the core network of the location of the mobile station is reduced.

In contrast to the Applicants' claimed invention Jokiaho merely discloses location updating for a packet switched data service in a mobile communications

system for directing data packets or paging messages relating to packet data to a mobile station (col. 3, lines 32-44 and col. 7, lines 30-36). Jokiaho also discloses location areas for data services (col. 7, lines 23-24) and updating procedures. The data service areas of Jokiaho may cover either one cell or a group of cells (col. 3, lines 34-37 and col. 7, lines 19-24). A mobile station using the packet data service monitors a control channel and makes an independent decision on location updating (col. 8, lines 27-30). Jokiaho merely discloses procedures for data service location update and update of location information in a database for routing packet data to the mobile station in the radio access network.

Jokiaho is different than the Applicants' claimed invention because Jokiaho merely discloses a criteria defined by the radio access network relating to selection of a location area by a mobile station whereas the Applicants set forth determining a reporting area in a core network and informing a radio access network by the core network of the reporting area determined.

Jokiaho is also different than Applicants' claimed invention because Jokiaho merely discloses the mobile station using criteria when it ,makes a decision on location updating, i.e., the mobile station may initiate location updating every time it performs a normal cell handover whereas the Applicants set forth particular actions being performed by the radio access network upon receipt of a location update or based upon the location update.

Jokiaho is also different than Applicants' claimed invention because Jokiaho merely discloses a mobile station actively and independently deciding to update its location and the radio access network adding a cell identifier automatically to the

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message the mobile station sends and the cell identifier may be transmitted together with the data packet out from the radio access network whereas the Applicants set forth informing a core network of the location of a mobile station at the level of accuracy the core network requires and wherein the radio access network determines upon receipt of a location update from a mobile station whether or not to report the location of the mobile station to the core network.

Stewart fails to remedy the deficiencies of Jokiaho. Stewart merely discloses a method for detecting the presence of a mobile unit entering a geographic location and relaying a signal to the network informing the network of the detected presence. Stewart, even if combined with Jokiaho, is different than the Applicants' claimed invention because the combination merely discloses a network communicating and providing data to a mobile station when the mobile station enters into a particular geographic region whereas the Applicants set forth a reporting are for informing a core network of a location of a mobile station at the level of accuracy in which the core network requires in order to facilitate access of the mobile station to services corresponding to the specified reporting area.

The Applicants respectfully submit that independent claim 26 distinguishes over Jokiaho and Stewart and is, therefore, in condition for allowance. Claims 44-46 set forth similar limitations as set forth in claim 26 and are allowable for at least the same reasons given above for claim 26.

Dependent claims 27-43, which are dependent from independent claim 26 are also rejected as being unpatentable over the combination Jokiaho and Stewart. While the Applicants do not acquiesce to any particular rejection to the dependent claims, it

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is asserted that these rejections are now moot in view of the remarks made in connection to independent claim 26. These dependent claims include all the limitations of the base claim and any intervening claims, and recite additional features which further distinguish these claims from the cited references. Therefore, dependent claims 27-43 are also allowable over the combination of Jokiaho and Stewart.

In view of the amendments and reasons provided above, it is believed that all pending claims are in condition for allowance. The amendments clarify the patentable invention without adding new subject matter. The Applicants respectfully request favorable reconsideration and early allowance of all pending claims.

If a telephone conference would be helpful in resolving any issues concerning this communication, please feel free to contact Applicant's attorney, Michael B. Lasky at (952) 253-4100.

Respectfully submitted,

Date: 15 Oct. 2002 By:

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